Pternistes infuscatus Cab.

Pternistes infuscatus Lort Phillips, Ibis, 1898, p. 425.

Pternistes leucoscepus infuscatus Reich. i. p. 455 (1901).

a. J. Waghar, 5th Sept., 1905.

Numida prilorhyncha (Licht.). Numida prilorhyncha Reich. i. p. 445 (1901). a. \( \cdot \). Waghar, 5th Aug., 1905.

XIII.—Remarks on some recently described Species of Calospiza\*. By C. E. Hellmayr, M.B.O.U.

(Plate V.)

Since the publication of Volume xi. of the 'Catalogue of Birds in the British Museum' our knowledge of the brilliant Tanagrine genus Calospiza has considerably advanced. Twelve new forms have been added to the already long list of species, and a good deal of fresh information about the relations and geographical distribution of others has been supplied by various authors. In 'The Ibis' for 1901, pp. 595-7, Dr. Sclater has given a short account of C. margaritæ Allen, C. johannæ Dalm., and C. emiliæ Dalm., accompanied by coloured figures of the two latter species taken from specimens in the Tring Museum. C. margaritæ belongs to the group of C. flava, and replaces it in Matto Grosso (Chapada). Another race of the same

<sup>\*</sup> Calospiza, G. R. Gray, List of Genera of Birds, 1840, p. 44: type C. tricolor (Gm.). Calliste Boie, 1826, et auct. (nec Callista Poli, 1791); cf. Stone, Proc. Acad. Nat. Sci. Philad. 1895, pp. 251-2. [We do not agree with Mr. Stone's view (op. cit.) that the similarity of "Calliste" of Boie to "Callista" of Poli precludes the usage of the former name. If spelled correctly the terms are different, and moreover belong to different branches of zoology, so that there is no chance of confusion. If we use "Picus" and "Pica," why should we reject "Calliste" because it is so like "Callista"?—Edd.]

formosa sincipitalis ('Ornis,' xiv. Feb. 1907, p. 348). The type came from Leopoldina, a place on the Rio Araguaya, in the Brazilian State of Goyaz, whence the Tring Museum also received several examples through Mons. G. A. Baer. In my report on M. Baer's collections \* I have discussed, at some length, the various geographical races of C. flava, viz.: C. flava flava (Gm.), Bahia to Pernambuco; C. flava chloroptera (Vieill.), São Paulo and Paraguay; C. flava sincipitalis Berl., Goyaz; C. flava margaritæ (Allen), Matto Grosso.

About the two Colombian species described by Comte de Dalmas I have to say a few words. Of *C. johannæ*, the Munich Museum has lately received an adult male, a female, and a young bird, from the Province of Chocó, Western Colombia. This striking species is evidently confined to the humid forests on the Pacific slopes of the Western Cordillera in Colombia and North-western Ecuador †. *C. emiliæ* Dalm., which inhabits the same district, I have shown to be the true *C. lavinia* of Cassin, and I have, accordingly, proposed the new name *C. lavinia dalmasi* for the Central American form ‡. A third race of this group has been separated as *C. lavinia eara* by Mr. O. Bangs in Proc. Biol. Soc. Wash. xviii. 1905, p. 155 (type from Ceiba, Honduras). It agrees with *C. l. dalmasi* in coloration, but is larger, with a much longer and more slender bill.

In 1901, Count Berlepsch described Calliste sophiæ, two specimens of which had been obtained by Mr. O. Garlepp at Songo in the Yungas of Western Bolivia (Journ. f. Ornith. 1901, p. 83). Shortly afterwards Mr. Jean Kalinowski forwarded a series from Marcapata, S.E. Peru, to the

<sup>\*</sup> Novit. Zool. xv. 1908, pp. 26-28.

<sup>†</sup> Dr. Sclater ('Ibis,' 1901, p. 597) recorded two specimens from Oroya and Rio Yinimbare, Peru, P. Simons coll. This, however, was due to some misunderstanding, for, as I am informed by Mr. C. Chubb, the British Museum does not possess specimens of *C. johannæ*, the two skins mentioned being referable to *Chlorochrysa fulgentissima* Chapm.

<sup>‡</sup> Revue Franç. d'Orn. ii. no. 11, March 1910, p. 162.

Branicki Museum \*. C. sophiæ is a near ally of C. pulchra Tsch., though easily distinguished by the different colour of the pileum, by having the chestnut of the throat somewhat duller, and extended on to the chest, &c.

In the same year, Mr. Ridgway separated the Veraguan form of *C. florida*, on account of its smaller size, more yellowish-green colour, and the absence of the yellow occipital patch in the male, under the name *C. florida arcæi* (Proc. Wash. Acad. Sci. iii. p. 149). Judging from a single specimen I consider it a fairly well-marked race.

The next year brought to light an interesting, though not strikingly distinct form of the "C. flaviventris" group. Up to that time we knew only three geographical races, to which Count Berlepsch and Mr. Hartert then added a fourth, Calliste mexicana † media (Novit. Zool. ix. 1902, p. 19: type from Maipures, Orinoco River). This subspecies, which in the coloration of the lower parts is exactly intermediate between C. m. mexicana from Cayenne and Surinam, and C. m. vieilloti of Trinidad, inhabits the Orinoco valley from the delta (Guancco) up to Maipures &c., the banks of its southerly tributary, the Caura, as well as the western parts of British Guiana. The well-known C. mexicana boliviana (Bonap.) is the western and southern representative of this section, being found in Eastern Colombia, Eastern Ecuador, Peru, and Brazil south of the Amazons, down to Northern Bolivia.

In 1903, Count Berlepsch pointed out that under Calliste festiva two easily distinguishable races had been united by ornithologists, calling also attention to the fact that the name festiva had to give way to the previous term cyanocephala of Müller. The typical C. cyanocephala cyanocephala is shown to range from Santa Catharina north to Espiritu Santo, while the specimens from Bahia (and Pernambuco) which differ in their smaller size, narrower orange spots to the median upper wing-coverts, and especially in the much clearer coral-red instead of deep scarlet sides of the head and

<sup>\*</sup> Berlepsch & Stolzmann, 'Ornis,' xiii. pt. ii. 1906, p. 109.

<sup>†</sup> This specific name ought to replace flaviventris.

nape, are provided with the new designation, C. cyanocephala corallina (Orn. Monatsber. xi. p. 18).

In their joint paper on Kalinowski's Peruvian collections, Count Berlepsch and Dr. Stolzmann discriminated *C. argentea fulvigula* (type ex Tambillo, N. Peru), while *C. a. viridicollis* Tacz., from Huiro, is shown to be the same as the birds from Central Peru, viz. *C. a. argentea* ('Ornis,' xiii. part ii. 1906, p. 80).

Mr. Bangs, in 1908, distinguished *C. gyroloides deleticia*, basing his description upon three adult birds taken by Mr. Mervyn G. Palmer at San Antonio, Western Colombia (Proc. Biol. Soc. Wash. xxi. p. 160). Its chief characteristic, when compared with *C. g. gyroloides* (Lafr.), is the lack of the bright yellow shoulder-patch. We have, in the Munich Museum, a good series from various localities in the Western Cordillera of Colombia, as well as several specimens from Rio Lima and "Bogotá," in all of which the lesser wingcoverts are green, not bright yellow. Yet more information about the ranges of the two races is required, for skins from Paramba, N.W. Ecuador, Quito, and Chanchamayo, Central Peru, agree with the Central American bird in the possession of the yellow shoulder-patch!

The last addition to the genus Calospiza was made by myself when, in 1909, I described C. palmeri as a new species. This beautiful bird, of which a detailed description will be found in the 'Revue Française d'Ornithologie,' no. 4. August 1909, pp. 49-50, was also discovered by Mr. Mervyn G. Palmer, in October 1908, at Sipi, a place situated on the river of the same name, in the province of Chocó, Western Colombia. C. palmeri agrees in general form and shape of the bill with C. brasiliensis (Linn.), but is very unlike it in coloration. In fact, it needs comparison only with C. cabanisi (Scl.), from Western Guatemala, which, however, differs in many important characters. The black on the face is much less extended, being restricted to the lores and a narrow line across the forehead and round the base of the lower mandible; the pileum is of a dull dark blue with the bases of the feathers largely black; the interscapular region



CALOSPIZA PALMERI.

is metallic grass-green; the lower back and rump are dull azure-blue instead of pale bluish grey; the sides of the head and throat dingy bluish green instead of pure white; the remainder of the lower parts is bluish, white, more whitish in the middle, decidedly tinged with bluish green on the flanks; the feathers of the chest are black with the slightly attenuated tips bluish white, but there is no trace of the golden vellow tinge, so conspicuous a feature in C. palmeri; the lesser wing-coverts, bluish grey in the latter, are metallic azure blue, more greenish blue at the tips, and shading into violet towards the edge of the wing; the edges of the median and greater wing-coverts, as well as those of the remiges and rectrices, are dull azure blue in C. cabanisi, bluish grev in C. palmeri. In the former the base of the lower mandible is pale brown, while the latter has the bill entirely black.

The type of *C. palmeri* (from which the figure (Pl. V.) is taken) is in the Zoological Museum of Munich.

XIV.—On the Great Invasion of Crossbills in 1909. By Joseph I. S. Whitaker, F.Z.S., M.B.O.U.

The following notes are the results of an inquiry which I have attempted to make regarding the exceptional, and, so far as regards recent years, I may say unprecedented, invasion of the Common Crossbill (Loxia curvirostra), which has occurred during the past summer and autumn throughout a considerable portion of Europe. This inquiry, I may at once observe, has no pretension to being a searching or exhaustive one. It was, indeed, my original intention to write of the Crossbill invasion so far as regards Italy alone, but the consideration that it was a matter which concerned the whole of Europe has induced me to extend my remarks to the wider sphere.

As in the case of Pallas's Sand-Grouse (Syrrhaptes paradoxus), partial, although occasionally very considerable, migrations of the Crossbill occur, from time to time, at